

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: METALUX

Report Number: P294309

Luminaire Tested: **24GR-LD5-38-FGW080-UNV-L93050-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P294309  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1901-084-25)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24GR-LD5-38-FGW080-UNV-L93050-W2A1-U-5000K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH FGW080 LENS  
Light Source: (336) 90 CRI LEDS TUNED TO 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3134.0 lumens  
Efficiency: N/A  
Efficacy: 118.5 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.25 / 1.36  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

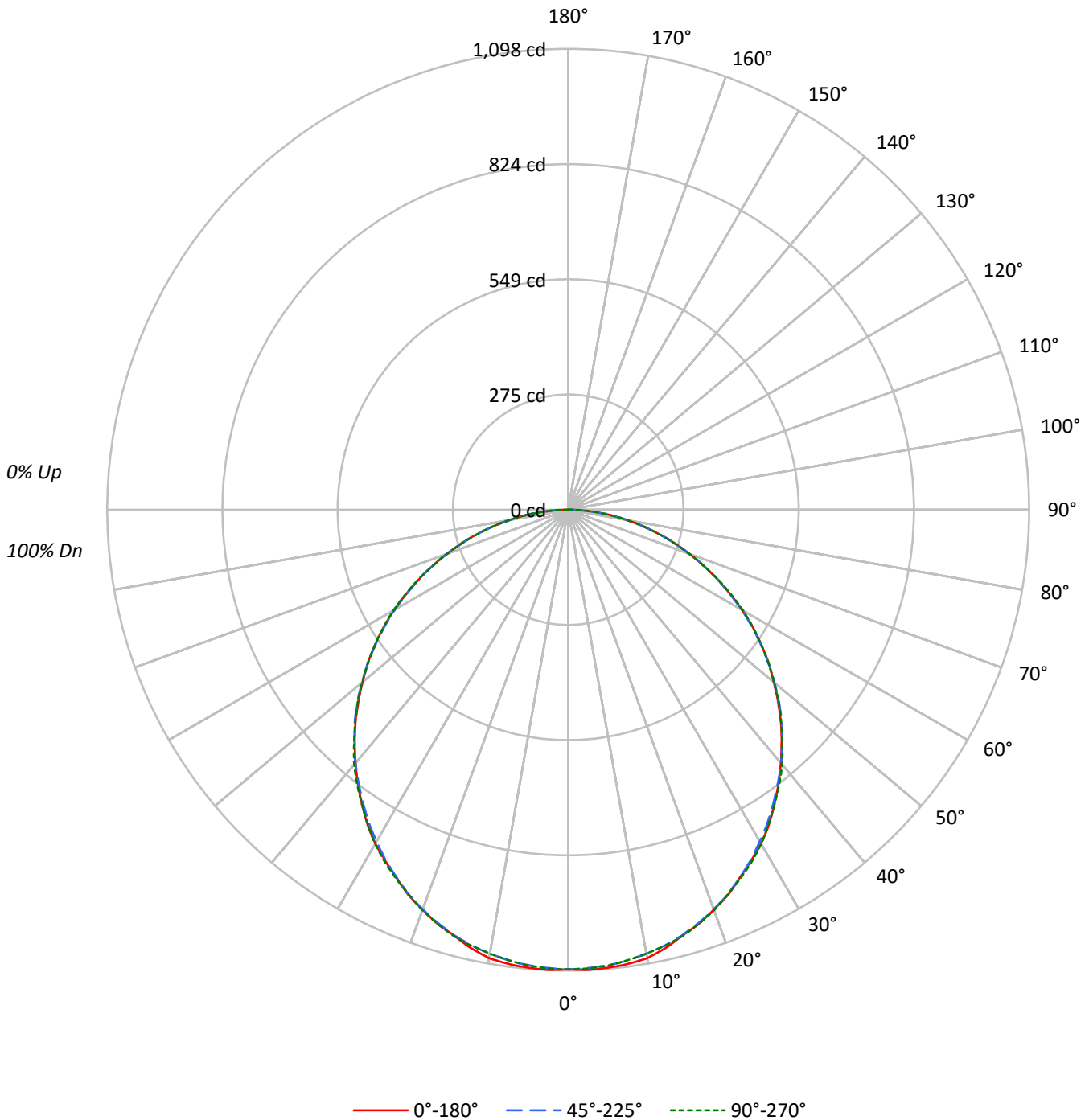
Input Watts (W): 26.455338  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20					20					20					20					20					
RC	80					70					50					30					10					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	108	103	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83					83			
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69					69			
3	90	79	71	64	87	77	70	63	74	68	62	71	66	61	69	64	60	58					58			
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49					49			
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	43					43			
6	70	56	47	41	68	55	47	40	53	46	40	52	45	40	50	44	39	37					37			
7	65	51	42	36	63	50	42	36	48	41	35	47	40	35	46	40	35	33					33			
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29					29			
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26					26			
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24					24			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	1474	1474	1474
5°	1479	1472	1472
10°	1482	1467	1467
15°	1463	1462	1465
20°	1452	1451	1454
25°	1436	1435	1440
30°	1427	1418	1429
35°	1407	1400	1407
40°	1384	1385	1393
45°	1364	1369	1366
50°	1338	1343	1340
55°	1318	1314	1318
60°	1287	1283	1295
65°	1247	1252	1257
70°	1207	1212	1204
75°	1164	1164	1164
80°	1099	1099	1111
85°	1016	1027	993



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	103.6	3.3
10°-20°	296.1	9.4
20°-30°	446.2	14.2
30°-40°	534.4	17.1
40°-50°	553.2	17.7
50°-60°	501.6	16.0
60°-70°	388.9	12.4
70°-80°	236.5	7.5
80°-90°	73.6	2.3
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	845.8	27.0
0°-40°	1380.3	44.0
0°-60°	2435.1	77.7
0°-90°	3134.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3134.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1095	1095	1095	1095	1095	
5°	1095	1089	1090	1088	1090	104
15°	1050	1051	1050	1046	1052	297
25°	968	968	967	970	970	447
35°	857	851	852	856	857	536
45°	717	718	719	716	718	552
55°	562	559	560	562	562	502
65°	392	394	393	392	395	388
75°	224	223	224	223	224	237
85°	66	65	66	66	64	74
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1095.4	1095.4	1095.4	1095.4	1095.4
2.5°	1097.6	1093.2	1093.2	1091.7	1093.9
5°	1095.4	1088.7	1089.5	1088.0	1090.2
7.5°	1091.7	1082.8	1083.5	1082.1	1082.8
10°	1085.0	1074.7	1073.9	1073.2	1073.9
12.5°	1070.2	1064.3	1063.6	1062.1	1064.3
15°	1050.3	1051.0	1049.5	1045.8	1051.8
17.5°	1034.8	1034.0	1032.5	1028.8	1034.8
20°	1014.1	1014.8	1013.3	1011.8	1015.5
22.5°	994.1	991.9	992.6	991.9	992.6
25°	967.5	967.5	966.8	969.7	969.7
27.5°	943.1	940.2	941.6	944.6	946.1
30°	918.7	911.3	912.8	915.8	919.5
32.5°	889.9	882.5	884.0	886.9	888.4
35°	856.6	850.7	852.2	855.9	856.6
37.5°	822.6	818.9	820.4	823.4	825.6
40°	787.9	786.4	788.6	787.9	793.1
42.5°	752.4	751.7	753.9	753.9	754.6
45°	716.9	718.4	719.2	716.2	717.7
47.5°	677.8	678.5	681.5	680.0	680.7
50°	639.3	638.6	641.6	642.3	640.1
52.5°	602.4	598.7	601.6	603.1	601.6
55°	561.7	558.8	560.2	562.5	561.7
57.5°	521.8	518.9	519.6	523.3	521.8
60°	478.2	477.5	476.7	479.7	481.2
62.5°	435.3	434.6	433.1	436.1	437.6
65°	391.7	393.9	393.2	391.7	394.7
67.5°	350.3	352.6	350.3	348.9	348.9
70°	306.7	309.0	308.2	306.7	306.0
72.5°	266.1	266.1	264.6	263.9	264.6
75°	224.0	223.2	224.0	223.2	224.0
77.5°	182.6	183.3	183.3	183.3	182.6
80°	141.9	141.9	141.9	142.6	143.4
82.5°	104.2	102.0	104.2	102.7	103.5
85°	65.8	65.0	66.5	65.8	64.3
87.5°	29.6	30.3	30.3	31.0	31.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)